Plant Physiol. (1995) 107: xxiii–xxvi
0032-0889/95/107/xxiii/04/$01.00/0

Author Index

A

Adams, Douglas O., 1009
Adams, Hank, 13
Adamska, Iwona, 1167
Adler, Klaus, 1387
Akazawa, Takashi, 25
Albersheim, Peter, 1129
Allen, Randy D., 1049
Almoguera, Concepción, 765
Ananvoranich, Sirinart, 1019
Andersen, Chris R., 1059, 1067
Anderson, Jan M., 943
Aoki, Toshio, 1463
Aono, Mitsuko, 645
Arioli, Tony, 1035
Arnold, Gillian M., 377
Arroo, Randolph R., 807
Assmann, Sarah M., 101
Atalla, Rajai H., 977
Auh, Chung-Kyoon, 1241
Ayala, Jose W., 1119

B

Badger, Murray R., 1469
Bagga, Suman, 13
Bailey, J. Clinton, II, 1277
Ballance, G. Murray, 1027
Banas, Antoni, 953
Bancal, Pierre, 1249
Banjoko, Adebiyi, 1201
Barnes, Simon A., 671
Barre, Annick, 833
Baskin, Tobias I., 233
Bass, Hank W., 661
Baszczynski, Chris L., 1439
Baucher, Marie, 285
Bauw, Guy, 177
Bauwe, Hermann, 271, 655
Bell, Jennifer A., 435
Bénaben, Véronique, 53
Bergmann, Ludwig, 515
Bielli, Anna, 1411
Bisht, Sher Singh, 751
Blom, Cornelius W. P. M., 1371
Boerjan, Wout, 285
Bolle, Cordelia, 1461
Boller, Thomas, 485
Bonham, Connie C., 621
Bonsall, Robert F., 603
Borg, Søren, 1457
Bortlik, Karlheinz, 1249
Boss, Wendy F., 491, 845
Boston, Rebecca S., 661
Bottino, Paul J., 1471
Boudet, Alain Michel, 1455
Braun, Hans-Peter, 1217
Breinholt, Mette, 149
Briggs, Winslow R., 161
Brightman, Andrew O., 1285
Brinkmann, Albert O., 639
Brown, Christopher S., 407
Brown, R. Malcolm, Jr., 111
Burke, John J., 429
Burkhart, William, 491
Burnell, James N., 299
Byrd, George T., 585

C

Caboche, Michel, 1427
Cai, Shutao, 73
Callan, Kristie L., 1105
Cande, W. Zacheus, 309
Cannon, Gordon C., 1277
Cannon, John F., 1479
Capiau, Katelijne, 737
Carbonell, Juan, 865
Carlson, John E., 331
Cary, Andrew J., 1075
Casey, Rod, 265
Castagnaro, Atilio, 1475
Ceriotti, Aldo, 1411
Chang, Li-Yun, 269
Chao, Wun Shaw, 253
Chappell, Joseph, 1
Cheng, Jin-Chen, 365
Cherutti, James F., 915
Chiang, Vincent L., 1459
Chinn, Ellen, 593
Cho, Myeon H., 845
Chollet, Raymond, 775
Chou, Hsing-Yu, 277
Chourey, Prem S., 757
Chow, Wah Soon, 943
Chrispeels, Maarten J., 1233
Christensen, Liselotte, 1457
Chu, Seung, 267
Chui, Chok-Fun, 291
Clark, K. Reed, 307
Close, Timothy J., 289
Cobbett, Christopher S., 1059, 1067
Coca, María A., 765
Cohen, Jerry D., 77, 323
Cohn, Marc Alan, 1365
Colepicolo, Pio, 225
Colman, Brian, 245
Conkling, Mark A., 1029
Cork, Ann, 233
Cosgrove, Daniel J., 87
Covarrubias, Alejandra A., 1119
Craig, Stuart, 1233
Crenshaw, Rebecca W., 1465
Critchley, Christa, 943
Croes, Anton F., 807
Culley, David E., 301
Cullimore, Julie V., 273

D

Dai, Ziyu, 815
Darvill, Alan G., 1129
Davies, Eric, 1481
Davies, William J., 377
Davis, Janice D., 1007
Day, David A., 1469
Dean, Jeffrey F. D., 501, 667
De Koning, Edward A., 807
Delhaize, Emmanuel, 207, 315
De Nisi, Patrizia, 1195
Denison, R. Ford, 1355
Denyer, Kay, 673
Devitt, Michelle L., 1031
de Vries, Hugo S. M., 1371
Dharmawardhana, D. Palitha, 331
Diaz del Castillo, Leonor, 1187
Dixon, Richard A., 1027
Dong, Seung-Myung, 313
Douglas, Pauline, 451
Downing, Willa L., 1439
Droog, Frans N. J., 1139
Duc, Gérard, 53
Duchateau, Nathalie, 1249
Ducruet, Jean-Marc, 187
Duff, Stephen M. G., 775
Dumas, Bernard, 1091

E

Ebskamp, Michel J. M., 125
Edwards, Gerald E., 815
Ellis, Brian E., 331
Else, Mark A., 377
Elthon, Thomas E., 443
Emmermann, Michael, 1467
Eriksson, Karl-Erik L., 501, 667
Eriksson, Mats, 479
Erneux, Christophe, 845
Etienne, Anne-Lise, 187

F

Falco, S. Carl, 291
Falk, Stefan, 687
Farah, Joseph, 1485
Felix, Georg, 485
Felker, Frederick C., 757
Ferguson, David L., 429
Ferl, Robert J., 283
Fieuw, Sabine, 905
Fink, Gerald R., 1479
Fleming, Andrew J., 1105
Fonné-Pfister, Raymonde, 719
Footitt, Steven, 1365
Frank, Gerhard, 1485
Franke, Kenneth E., 1009
Franklin, Amie, 1013
Franklin, Linda A., 943
Freyermuth, Sharyn K., 1479
Freyssinet, Georges, 1091
Fritz, Markus, 1039
Fuerst, E. Patrick, 311
Fujiyama, Kousaku, 645
Fukuda, Hiroo, 1083
Fürst, Patricia, 1037

G

Galili, Gad, 281
Gálvez, Susana, 905
Gamas, Pascal, 273
Gao, Xiao-Shu, 665
García-Olmedo, Francisco, 1475
Garciarrubio, Alejandro, 1119
Gardeström, Per, 479
Gardner, Richard C., 341
Garić-Stanković, Ana, 1481
Geibel, Martin, 603
Geiger, Donald R., 507
Getz, Hans Peter, 459
Gielen, Jan, 285
Giovannoni, James J., 1343
Gladon, Richard J., 1033
Gogarten, Johann Peter, 659

Goh, Chong-Jin, 1021
Goldsbrough, Peter B., 621, 1059, 1067
Gollasch, Stephanie, 1233
Goodner, Bradley W., 1007
Goossens, Karine, 1147
Gorst, Janet R., 233
Gotor, Cecilia, 1015
Govindjee, 187
Granado, José, 485
Gray, John C., 671
Greenland, Andrew J., 1011
Grima-Pettenati, Jacqueline, 1455
Gross, Dennis C., 603
Gross, Wolfgang, 491
Gruissem, Wilhelm, 1105
Guha-Mukherjee, Sipra, 1023
Guikema, James A., 1333
Gulick, Patrick, 1019
Guo, Ailan, 1333
Guo, Yan-Lin, 167
Gustafsson, Petter, 873

H

Hadwiger, Lee A., 301
Hahn, Daniel T., 621, 631
Hahn, Tae-Ryong, 313
Hall, Keith C., 377
Hall, Robert D., 1379
Handa, Avtar K., 669
Hannapel, David J., 293, 1033
Hardie, Darryl C., 1233
Harper, Stacy N., 1465
Harren, Frans J. M., 1371
Harris, Philip J., 1399
Harter, Barry L., 1355
Hartley, Martin, 1323
Hastings, J. Woodland, 225
Hatano, Mika, 719
Hatfield, Peggy M., 797
Hayakawa, Kenji, 719
Heberle-Bors, Erwin, 263, 639
Heffron, Susan E., 963
Heinhorst, Sabine, 1277
Heinz, Ernst, 1039
Held, A. Alejandro, 421
Helm, Kenneth W., 287
Henrissat, Bernard, 963
Hernandez, Magdalena, 1119
Herrmann, Klaus M., 7
Herrmann, Reinhold G., 1461
Hey, Timothy D., 1323
Hicks, Glenn R., 1055
Hidalgo, Antonio, 1285
Higgins, Dan W., 657
Higgins, Thomas J. V., 1233
Hilgarth, Christian, 33
Hill, Sylvia, 915
Hirt, Heribert, 263
Hoffman, Neil, 1013
Höfgen, Rainer, 469
Hohlfeld, Hartwig, 545
Hohtola, Anja, 593
Hondred, David, 797
Hooykaas, Paul J. J., 1139
Horiguchi, Gorou, 1177
Horovitz, Daniel, 301
Horwitz, Benjamin A., 161
Houtman, Carl J., 977
Howald, William N., 1433
Howden, Ross, 1059, 1067
Howell, Stephen H., 1075
Howles, Paul A., 1035
Hu, X., 305
Huang, Jing, 1129
Huang, Laiqiang, 1013
Huang, Ning, 25
Huguet, Thierry, 53
Huner, Norman P. A., 687, 873
Hussey, Patrick J., 309, 1011

I

Iacobazzi, Vito, 1473
Iba, Koh, 1177
Ibrahim, Ragai K., 1019
Imaseki, Hidemasa, 297
Inaba, Akitsugu, 199
Inzé, Dirk, 285, 649, 725, 737
Irish, Vivian F., 1029
Irzyk, Gerard, 311
Ishitani, Manabu, 703
Itoh, Kimiko, 25
Iwamoto, Tomotada, 199
Iwasaki, Genji, 719

J

Jackson, Michael B., 377
Jacobs, John J., 807
Jansson, Stefan, 873
Jeuken, Marieke J. W., 125
Jiang, Cai-Zhong, 215
Jiang, Jin-Wei, 985
Jiang, Liwen, 1439
John, Maliyakal E., 1477
John, S. Jacob, 1023
Johnson, Margaret Dean, 613
Joly, Robert J., 621, 631
Jonak, Claudia, 263
Jones, Paul G., 1483
Jones, Robert J., 385
Jordan, Emily T., 797
Jordano, Juan, 765
Joy, Richard W., IV, 1083
Joyce, Paul B. M., 303
Jurnak, Frances, 349, 963

K

Kameya, Nanako, 1463
Kameya, Toshiaki, 275
Kaminaka, Hironori, 651
Kamiya, Yuji, 131
Kampfenkel, Karlheinz, 725
Kang, Kwon Kyoo, 275
Kang, Sang-Gu, 293
Kanzaki, Hiroyuki, 1463
Kaufman, Lon S., 161
Kausch, Kurt D., 669
Kemp, John D., 13, 155
Kendrick, Richard E., 131
Kenefick, Donald G., 269
Kermode, Allison R., 1439
Khan, Safina, 309, 1011
Kimura, Yoko, 719
King, John, 43
Kirilovsky, Diana, 187
Kitayama, Masahiko, 393
Klapheck, Sigrid, 515
Klee, Harry J., 1343
Klein, Markus, 459
Kleinhofs, Andris, 1303
Kleppinger-Sparace, Kathryn F., 413
Klonus, Ann-Kristin, 469
Klonus, Dirk, 653
Klunder, Anton J., 807
Knegt, Erik, 695
Knight, Jacqueline S., 671
Knighton, Michelle L., 1017
Knudten, Andrew F., 443
Kobayashi, Masatomo, 131
Kodama, Hiroaki, 1177
Koizumi, Shin-ichi, 719
Komamine, Atsushi, 1083
Kondo, Noriaki, 645
Kooter, Jan M., 695
Kopriva, Stanislav, 271, 655
Kraepiel, Yvan, 1427
Krens, Frans A., 1379
Krishna, Priti, 915
Król, Mariana, 873
Krumpelman, Paulette M., 1479
Ku, Maurice S. B., 815
Kück, Ulrich, 663
Kudlicka, Krystyna, 111
Kuga, Shigenori, 111
Kung, Shain-dow, 1471
Kurkdjian, Armen C., 783
Kuzma, Monika M., 1209
Kwan, Mei Yee, 303

L

Laber, Bernd, 469
LaFayette, Peter R., 667
Lanahan, Michael B., 1343
Lång, Viola, 141
Laser, Beate, 663
Lay-Yee, Michael, 1017
Layzell, David B., 1187, 1209
Leach, Graeme, 925
Leach, Jan E., 1333
Lebrun, Laurie, 1013
Lee, Angela Iue-chih, 565
Lee, Jong H., 111
Lee, Ping-Du, 277
Lee, Sanghyeob, 1343
Leech, Rachel M., 63
Lefebvre, Véronique, 53
Lennon, Adrian M., 925
Lescure, Nicole, 273
Leydecker, Marie-Thérèse, 1427
Li, Likun, 111
Li, Ze-Sheng, 1257
Lietzke, Susan E., 963
Lillo, Cathrine, 451
Lin, Chi-Tsai, 277
Lin, Ming-Tse, 277
Lin, Zhenwu, 279
Lisitsky, Irena, 933
Liu, Bin, 985
Liu, Lan, 501
Liu, Vincent, 253
Liu, Wennuan, 1075
Liu, Xiong, 73
Liveanu, Varda, 933
Lloyd, Julie C., 1483
Lopez, Imelda, 309, 1011
López-Juez, Enrique, 131
Luethy, Michael H., 443
Lüscher, Marcel, 1419

M

MacKintosh, Carol, 451
Madsen, Tom Vindbæk, 149
Mäenpää, Pirkko, 187
Manabe, Taro, 199

Mano, Jun-ichi, 719
Mäntylä, Einar, 141
Marco, Eduardo, 1159
Marolda, Michèle, 1455
Martin, Cathie R., 673
Martínez, Flor, 1159
Matsunaga, Shin-ichiro, 719
Matzke, Antonius J. M., 679
Matzke, Marjori A., 679
Maxwell, Denis P., 687
McQueen-Mason, Simon J., 87
Meeks, John C., 267
Meeuse, Bastiaan J. D., 1433
Meier, Iris, 1105
Meijer, Marcel, 1469
Melis, Anastasios, 885
Mercier, Richard W., 659
Merino, José, 421
Meyer, Nicole C., 289
Miao, Guo-Hua, 279
Miki, Takeshi, 297
Minamikawa, Takao, 1025
Miranda, Teresa, 187
Mita, Satoru, 895
Mitra, Amitava, 657
Mo, Yin-Yuan, 603
Moisyadi, Stefan, 295
Mol, Joseph N. M., 695
Mönke, Gudrun, 1451
Montague, Michael J., 553
Moons, Ann, 177
Moore, Andrew, 1233
Moore, Anthony L., 925
Moore, Bradley S., 1433
Mori, Hitoshi, 297
Mori, Ichiro, 719
Morré, D. James, 1285
Mourad, George, 43
Moureaux, Thérèse, 1427
Moyer, Mary, 1465
Muhitch, Michael J., 757
Müller, Bernd, 1129
Müller-Röber, Bernd, 905
Murphy, Ricardo, 995
Murphy, Terence M., 1241

N

Nadolska-Orczyk, Anna, 621
Nagasaka, Chie, 631
Nakagawa, Hiroki, 297
Nakamura, Ikuo, 1463
Nakamura, Kenzo, 895
Nakano, Toshihito, 719
Navas, Placido, 1285
Nelson, Curtis J., 1419
Nikolau, Basil J., 1013
Nishimura, Mitsuo, 1177
Nishiuchi, Takumi, 1177
Nomura, Mika, 703
Norita, Eiko, 1463
Normanly, Jennifer, 323

O

Oaks, Ann, 1225
OBrian, Gregory R., 661
Oelmüller, Ralf, 1461
Oettler, Gitta, 663
Ogren, William L., 585
Ogura, Nagao, 297
Oh, Hae Young, 1453
Ohta, Daisaku, 719
Okpodu, Camellia Moses, 491
Okuley, John J., 307
Okumura, Takekazu, 651
Oliver, Melvin J., 429
Omata, Tatsuo, 791
Öquist, Gunnar, 873
Ort, Donald R., 585
Ortega, Joseph K. E., 995
Orús, María Isabel, 1159
Osmond, C. Barry, 943

P

Pallett, Kenneth E., 1091
Palmieri, Ferdinando, 1473
Palva, E. Tapio, 141
Pathirana, Sudam M., 827
Paul, Matthew J., 125
Pérez-Amador, Miguel A., 865
Peters, N. Kent, 857
Peumans, Willy J., 833, 1147
Pilon-Smits, Elizabeth A. H., 125
Pintor-Toro, Jose A., 1015
Pladys, Dominique, 857
Platt, Kathryn, 253
Podila, Gopi K., 1459
Poeydomenge, Odile, 1455
Pohlenz, Hans-Dieter, 469
Polacco, Joseph Carmine, 1097, 1479
Polking, Gary F., 1033
Potter, Sharon, 311
Poulsen, Carsten, 1457
Pratt, James, 925
Preiss, Susanne, 709
Premachandra, Gnanasiri S., 621, 631
Price, G. Dean, 1469
Prinsen, Els, 177
Privalle, Laura S., 1465
Prokhorenko, Izabella, 1387
Pua, Eng-Chong, 1021

Q

Qi, Qungang, 413
Quail, Peter H., 523
Quatrano, Ralph S., 1007

R

Raab, Theodore K., 575
Rabotti, Giuseppina, 1195
Radik, Judy, 289
Rai, Ashwani K., 703
Raikhel, Natasha V., 1055
Raines, Christine A., 1483
Rajasekharan, Ram, 155
Ramalho, Camila Balsamo, 225
Randall, Peter J., 207
Rao, I. Madhusadana, 1313
Rauser, Wilfried E., 1293
Rea, Philip A., 1257
Reddy, A. S. N., 305
Relle, Manfred, 1037
Reuss, Jörg, 1371
Reyes, Jose L., 1119
Rhim, Je-Hwan, 313
Rhodes, David, 621, 631
Rhodes, Judith C., 621
Rich, Patrick J., 621
Richards, Keith D., 341
Riesmeier, Jörg W., 653
Robertson, Elizabeth J., 63
Robinson, Sharon A., 943
Rochaix, Jean-David, 1485
Rodermel, Steven R., 215
Rodríguez, María Luisa, 1159
Rodriguez, Raymond L., 25
Romero, Luis C., 1015
Rooney, Michael F., 283
Rougé, Pierre, 833
Roux, Stanley J., 167
Rozycka, Magdalena, 1011
Russell, A. Wendy, 943
Ryan, Peter R., 315

S

Sacco, Melanie, 915
Saji, Hikaru, 645
Sakamoto, Atsushi, 651
Sakurai, Akira, 131
Salminen, Seppo O., 857
Salt, David E., 1293
Samaras, Yiannis, 621
Samuelsson, Göran, 479
Saneoka, Hirofumi, 621, 631
Sano, Hiroshi, 275
Saravitz, David M., 535
Sato, Takahide, 297
Sauer, Norbert, 33
Schauser, Leif, 1457
Scheel, Dierk, 545
Scheidegger, Alfred, 719
Schlunz, Sigrid, 515
Schmeits, James, 287
Schmitz, Udo Klaus, 1217, 1467
Schnorr, Kirk, 1427
Schroeder, Hartmut E., 1233
Schürmann, Wolfgang, 545
Schussler, Jeffrey R., 385
Schuster, Gadi, 933
Schüttke, Iris, 469
Seaton, George G. R., 943
Seeley, Kevin Andrew, 365
Segal, Gregorio, 281
Segura, Ana, 1475
Sengupta-Gopalan, Champa, 13
Sevik, Martine, 309
Sharma, Parma Nand, 751
Sharma, Rameshwar, 401
Shears, Stephen B., 845
Shieh, Mark, 1055
Shieh, Wen-Jang, 507
Shimamoto, Ko, 25
Shimoni, Yuval, 281
Shin, Heungsop, 111
Shintani, Ai, 1025
Shockey, Jay M., 155
Siedow, James N., 535
Silverthorne, Jane, 593
Simmen, Urs, 1249
Sims, Thomas L., 307
Sivasankar, Sobhana, 1225
Skubatz, Hanna, 1433
Slooten, Luit, 737
Slovin, Janet Pernise, 77, 323
Smeekens, Sjef C. M., 125
Smeets, Koen, 833, 1147
Smith, Alison M., 673
Smith, Bronwen G., 1399
Smith, Christopher M., 1481
Smith, Harley M. S., 1055
Smith, M. Kathleen, 1469
Snowden, Kimberley C., 341
Somers, David E., 523
Sonnewald, Uwe, 1451

Spangfort, Michael D., 873
Sparace, Salvatore A., 413
Spencer, Donald, 1233
Srivastava, Vibha, 1023
Stadler, Ruth, 33
Stafstrom, Joel P., 1031
Ståhl, Ulf, 953
Stanković, Bratislav, 1481
Stebbins, Norm E., 1097
Stiles, John I., 295
Strack, Dieter, 545
Streber, Wolfgang, 469
Streeter, John G., 857
Stymne, Sten, 953
Su, Jong-Ching, 277
Sueyoshi, Kuni, 1303
Sugita, Mamoru, 645
Sugiyama, Munetaka, 1083
Sugiyama, Tatsuo, 791
Summers, Michael L., 267
Sung, Zinmay Renee, 365
Süss, Karl-Heinz, 1387
Sussex, Ian M., 613, 1029
Sutton, Fedora, 269
Suzuki, Iwane, 791
Suzuki, Shoichi, 299
Suzuki-Fujii, Kanako, 895
Svee, Eric R., 1433
Sybesma, Chris, 737
Szybiak-Strozycka, Urszula, 273

T

Tabe, Linda M., 1233
Tada, Sachiyo, 719
Tada, Toru, 1463
Takabe, Teruhiro, 703
Takabe, Tetsuko, 703
Taliercio, Earl W., 757
Talon, Manuel, 797
Tam, Yuen Yee, 77
Tan, Zheng, 845
Tanaka, Kiyoshi, 645
Tanaka, Kunisuke, 651
Tang, William, 1433
Tanksley, Steven D., 1343
Tanner, Widmar, 33
Terry, Norman, 575, 1313
Thelen, Jay J., 443
Thompson, William F., 161
Thomson, William W., 253
Thornber, J. Philip, 565, 709
Tjepkema, John D., 827, 1269
Togasaki, Robert K., 393
Topunov, Alexey F., 1209
Torrekens, Sophie, 833
Touraev, Alisher, 639
Trelease, Richard N., 1201
Tripathi, Alka, 751
Tripathy, Baishnab C., 407
Troxler, Robert F., 985
Tsai, Chung-Jui, 1459
Tsuji, Hiroyuki, 199
Tyystjärvi, Esa, 187
Tyystjärvi, Taina, 187

U

Uchimiya, Hirofumi, 1463

V

Vally, Kommineni J. Maragatha, 401
Van Breusegem, Frank, 649
Van Camp, Wim, 737
Van Damme, Els J. M., 833, 1147
van der Luit, Arnold, 695
Van Der Straeten, Dominique, 177
van der Valk, Henry C. P. M., 1371
van der Zaal, Bert J., 1139
Van Doorsselaere, Jan, 285
Van Leuven, Fred, 833, 1147
Van Montagu, Marc, 177, 285, 649, 725, 737
van Tunen, Arjen J., 639
Verhaert, Peter, 1147
Verhoeven, Harrie A., 1379
Verma, Desh Pal S., 279
Vermeer, Evert, 695
Vierling, Elizabeth, 287
Vierstra, Richard D., 797
Villar, Rafael, 421
Villarroel, Raimundo, 649
Vitale, Alessandro, 1411
Voesenek, Laurentius A. C. J., 1371

W

Walling, Linda L., 253
Walsh, Terence A., 1323
Ward, Eric, 311
Warner, Robert L., 1303
Watson, John C., 1471
Weaver, Lisa M., 1013
Webb, Mary Alice, 435
Webb, Michael R., 885
Weinman, Jeremy J., 1035
Weisbeek, Peter J., 125
Weiss, David, 695
Wen, Chao-Ming, 1021
Weng, Wen-Mei, 665
Westgate, Mark E., 385
Whelan, James, 1469
White, Frank F., 1333
White, Michael J., 161
Wiemken, Andres, 1249
Wild, Aloysius, 1037
Williams, Timothy G., 245
Williamson, Richard E., 233
Willmitzer, Lothar, 653, 905
Wolf, Konrad, 33
Wolf, Richard E., Jr., 267
Wolter, Frank P., 1039
Woltering, Ernst J., 1371
Wood, Andrew J., 621
Wood, Karl V., 621
Wu, Mian, 1021
Wu, Wei-Hua, 101
Wullems, George J., 807
Wurtele, Eve Syrkin, 1013

X

Xu, Mei-Lin, 665
Xue, Zhong-Tian, 665

Y

Yamaguchi, Junji, 25
Yamamoto, Mitsuaki, 297
Yamamoto, Yuri T., 1029
Yamauchi, Daisuke, 1025
Yan, Yiding, 985
Yang, Moon Sik, 1453
Yang, Wen-Ju, 621, 631
Yen, Hsiao-Ching, 1343
Yen, Lung-Fei, 73
Ylstra, Bauke, 639
Yoder, Marilyn D., 349, 963
Young, Scott A., 1333
Yu, Jian-Wei, 1469
Yu, Xiao-Ming, 507

Z

Zablackis, Earl, 1129
Zambryski, Patricia, 1041
Zeevaart, Jan A. D., 797
Zeng, Shengyou, 1269
Zhao, Yan, 1471
Zhao, Ying, 1257
Zhaohua, Peng, 857
Zhu, Xiao-zhu, 281
Zhuang, Nai-Liang, 665
Zinselmeier, Chris, 385
Zocchi, Graziano, 1195
Zonia, Laura E., 1097
Zuber, Herbert, 1485
Zupan, John R., 1041

Plant Physiol. (1995) 107: xxvii–xxxii
0032-0889/95/107/xxvii/06/$01.00/0

Subject Index

A

Abscisic acid
  Arabidopsis thaliana freezing tolerance and, 141
  and molybdenum cofactor synthesis, mutants affected in, 1427
  pigmentation gene induction and, in petunia, 695
  rice root salt tolerance and, 177
  in tomato transpiration stream, 377
Acer pseudoplatanus (*see* Sycamore maple)
Acetolactate synthase, in potato, antisense inhibition of, 469
Acid invertase gene, in *Arabidopsis thaliana* cell wall, 659
Acidic laccase, in sycamore maple, 667
Actin
  in *Fucus disticus*, 1007
  polymerization and depolymerization of, in corn pollen, 73, 1011
Adenosine triphosphate, potassium channel activation of, in broad bean, 101
Adenosine triphosphate sulfurylase, in *Arabidopsis thaliana*, 653
S-Adenosyl-L-methionine synthetase, from mustard, 1021
Adenylate level, in soybean nodule, temperature and, 1209
Aegilops, type V thionins in, 1475
Agrobacterium T-DNA, transfer of, to plant cell, 1041
Alfalfa
  chalcone reductase in, 1027
  protein encoding by, 263
  root hair of, depolarization of, 783
  root nodule of, oxygen permeability in, nitrate and, 1355
Allantoinases, of soybean nodules and cotyledons, 435
Aluminum, toxicity of, 315
Aluminum-induced genes, in wheat root tips, 341
Aminocyclopropane-1-carboxylate, in tomato transpiration stream, 377
Aminocyclopropane-1-carboxylate synthase
  in apple, 1017
  in melon fruit, 297
5-Aminolevulinic acid dehydratase, in tomato, 1033
α-Amylase
  light-induced, in pearl millet chloroplast, 401
  in transgenic rice, 25
β-Amylase, in *Arabidopsis thaliana* leaf, 895
Anthocyanin biosynthetic gene, induction of, petunia gibberellins and, 695
Apple, aminocyclopropane-1-carboxylate synthase in, 1017
Arabidopsis thaliana
  animal phosphoinositide-specific phospholipase gene similar to, 1029
  ATP-sulfurylase in, 653
  A-T tract-binding protein in, 657
  cell wall acid invertase gene in, 659
  cinnamyl alcohol dehydrogenase in, 285
  cytokinin and ethylene response coupling in, 1075
  endomembrane of, heat-shock protein in, 287
  freezing tolerance of, abscisic acid and, 141
  G-box binding factors in, 283
  glutathione-deficient mutants of, 1067
  inositol phosphate synthase in, 613
  isoleucine-deficient mutants of, 43
  leaf of
    cell wall polysaccharides of, 1129
    photosystem II and D1 protein in, 943
  meristematic activity of, genetics of, 365
  methylcrotonyl-coenzyme A carboxylase of, 1013
  phosphate-accumulating mutant of, 207
  phytochelatin-deficient mutants of, 1059
  root growth of, cytokinin and, 233, 1075
  rosette leaf of, β-amylase gene in, 895
  seed of
    isoleucine feedback deficiency in, 43
    nitrogen-limited, germination of, urease in, 1097
  thaumatin-like protein in, 305
  vacuolar glutathione *S*-conjugate transport in, 1257
  seedling of
    phytochrome promoters in, 523
    root and hypocotyl growth in, cytokinin-ethylene coupling and, 1075
Arabidopsis thaliana arginase, in yeast, 1479
Arginine decarboxylase, of unpollinated pea ovary, 865
Aromatic metabolism, shikimate pathway and, 7
Arum maculatum major protein tuber, as lectin, 1147
Ascorbate peroxidase, in corn, 649
A-T tract-binding protein, in *Arabidopsis thaliana*, 657
Auxin, biosynthesis and metabolism of, 323
Auxin-stimulated NADH oxidase, in soybean hypocotyl, thiol reagent and, 1285
Avena sativa (*see* Oat)
Axillary bud, of pea, ribosomal protein L27 in, 1031

B

Bark, of black locust, lectins in, 833
Barley
  Chlorina f2 mutant of, pigment-proteins of, 709, 873
  dehydrin in, serine tract missing in, 289
  high mobility group protein in, 269
  leaf of, sucrose:fructan 6-fructosyltransferase in, 1249
  nitrate reductase expression in, nitrate regulation of, 1303
  pigment-protein complexes in, pigment stoichiometry of, 565
  seedling of, germin-like oxalate oxidase in, 1091
Bean
  cotyledon of, binding protein promiscuity in, 1411
  glycerol-3-phosphate acyltransferase in, 1039
  seedling of, water deficit-induced proteins in, 1119
Beet
  interactions of carbon, nitrogen, and nutrients in, 575
  leaf of
    guard-cell totipotency of, 1379
    phosphate status, photosynthesis and carbon partitioning of, 1313
  mitochondria of, NAD(P)H dehydrogenase in, 443
  root of, tonoplast of, sucrose transport in, 459
Berry, of grape, malic enzyme in, 1009
Beta vulgaris (*see* Beet)
Betaine aldehyde dehydrogenase gene, in *Synechococcus* sp. PCC7942, salt stress and, 703
Binding protein, in bean cotyledon, 1411
Birdsfoot trefoil, root nodule of, oxygen permeability in, nitrate and, 1355
Black locust, bark of, lectins in, 833
Black spruce, cellulose-lignin interactions in, 977
Bradyrhizobium japonicum bacteroids, nodule-specific polysaccharide and, in soybean, 857
Brain protein homolog, from pea, 1481
Brassica juncea (*see* Mustard)
Brassica napus (*see* Rape)
Brassica oleracea (*see* Cauliflower)
Broad bean, potassium channel activation in, 101
Bruchus pisorum (*see* Pea weevil)
Bud, axillary, of pea, ribosomal protein L27 in, 1031

C

C_4 photosynthesis, in corn, 815
Caffeic acid/5-hydroxyferulic acid *O*-methyltransferase, *Populus* gene encoding, 1459
Callitriche cophocarpa, growth and nutrient uptake by, 149
Calmodulin-like protein, in assimilate-accumulating tobacco, 1451
Carbohydrate metabolism, in corn ovary, 385
Carbon, interactions with nitrogen and nutrients, in beet, 575
Carbon dioxide, wheat chloroplast development and, 63
Carbon metabolism, in tobacco leaf, 507
Carbon partitioning, in beet leaf, 1313
Carbonic anhydrase, in rice chloroplast, 299
Carboxysomes, of *Synechococcus* sp. PCC7942, biogenesis and ultrastructure of, 1159
Carrot
  phosphoinositide phospholipase C in cellular plasma membrane of, mastoparan and, 845
  soluble phosphatidylinositol 4-kinase in, 491
Cationic peroxidase, in rice, localization of, 1333

Cauliflower, stomatal opening in, zinc and, 751
Cell, of plant, *Agrobacterium* T-DNA transfer to, 1041
Cell wall acid invertase gene, in *Arabidopsis thaliana*, 659
Cell wall polysaccharides, of *Arabidopsis* leaf, 1129
Cellulose, lignin interactions with, in black spruce, 977
Chalcone reductase, in alfalfa, 1027
Chalcone synthase, in clover, 1035
Cherry tomato, ethylene emission from, 1371
Chickpea, threonine deaminase in, 1023
Chilling stress
  fatty acid desaturation in, in tobacco leaf, 1177
  Rubisco activation and, in tomato, 585
Chlacone synthase, in clover, 1035
Chlamydomonas reinhardtii
  chloroplasts of
    enzymes in, 1387
    phosphoglycerate kinase in, 393
  mitochondria of, isolation and characterization of, 479
  photosystem I PsaD subunit from, 1485
Chlorophyll, retention of, by soybean seed mutants, 253
Chlorophyll *a*/*b*-binding protein genes, fluence response of, 161
Chloroplast
  of *Chlamydomonas reinhardtii*, phosphoglycerate kinase in, 393
  of *Dunaliella salina*, irradiance stress and, 885
  oxidative stress tolerance in, 1049
  of pea, fructose-1,6-bisphosphatase from, 313
  of potato, ribosomal protein S16 in, 293
  of pearl millet, light-induced α-amylase in, 401
  of rice, carbonic anhydrase in, 299
  of soybean, deoxynucleotide incorporation by, 1277
  of spinach, ribonucleoprotein from, RNA-binding characteristics of, 933
  of tobacco, manganese superoxide dismutase overproduction in, 737
  of wheat
    development of, 63
    phosphoglycerate kinase in, 1483
Chorella kessleri, symporters of, 33
Chorella saccharophila, photosynthesis in, 245
Chorella vulgaris, photoinhibition in, resistance to, 687
Cinnamyl alcohol dehydrogenase, in *Arabidopsis thaliana*, 285
Clover, chalcone synthase in, 1035
Coffee, leaf of, metallothionein I-like protein in, 295
Coffea arabica (*see* Coffee)
Confierin β-glucosidase, from pine xylem, 331
Copper/zinc-superoxide dismutase, in rice, 651
Corn
  ascorbate peroxidase in, 649
  glycinebetaine deficiency in, 621, 631
  GTP-binding proteins in, 275
  kernel of, glutamine synthetase in, nitrogen transport and, 757
  leaf of, development of, photosynthesis and, 815
  mitochondria of, NAD(P)H dehydrogenase in, 443
  nuclear import signals in, 1055
  ovary of, carbohydrate metabolism in, 385
  pollen from
    actin-depolymerizing factor in, 1011
    actin polymerization in, 73
  ribosome-inactivating protein gene in, 661, 1323
  salt tolerance in, 631
  seed storage protein of, 13, 291
  seedling of
    glutathione *S*-transferase in, 311
    growth of, nitrate reductase and, 1225
  γ-tubulin from, 309
Cotton, plasma membrane of, β-glucan synthesis in, 111
Cotton fiber, mRNA of, 1477
Cotyledon
  of bean, binding protein promiscuity in, 1411
  of soybean, allantoinase in, 435
Crown gall, *Agrobacterium* T-DNA transfer in, 1041
Cucumber
  fruit of, ethylene induction in, impedance analysis of, 199
  hypocotyl of
    cell walls of, expansin and, 87
    phytochrome and gibberellins and, 131
  root of, iron deficiency in, 1195
Cucumis melo (*see* Melon)
Cucumis sativis (*see* Cucumber)
Cuphea procumbens, microsomal phospholipases of, fatty acid selectivity of, 953
Cyanidium caldarium, phycocyanin genes in, 985
Cysteine protease, putative, in rice seed, 1025
Cytochrome *c* reductase 14-kDa subunit, in potato, 1217
Cytokinin
  Arabidopsis thaliana root growth and, 233, 1075
  ethylene coupling to, root and hypocotyl elongation and, in *Arabidopsis*, 1075
Cytoplasm, male sterility, in wheat, 663

D

D1 protein, of *Arabidopsis thaliana* leaf, 943
Darkness, dark leaf respiration in, of evergreen and deciduous plants, 421
Daucus carota (*see* Carrot)
D-*de* loop mutation, in photosystem II, 187
Deciduous plant, dark leaf respiration in, 421
Dehydrin, in barley, serine tract missing in, 289
Desiccation, storage protein gene expression and, in tobacco, 1439
2,4-Dichlorophenoxyacetic acid, auxin-regulated tobacco glutathione *S*-transferase in, 1139
Diffusion barrier, in *Myrica gale* root nodules, 1269
Disease resistance response gene, in pea, 301
Disulfide isomerase, in wheat grain, 281
Drought, soybean nodule and, 1187
Drought resistance, in fructan-accumulating tobacco, 125
Dunaliella salina, chloroplasts of, irradiance stress and, 885

E

Endomembrane, of *Arabidopsis thaliana*, heat-shock protein in, 287
Epicotyl, of pea, hydrogen peroxide production in, 501
Erwinia chrysanthemi, pectate lyase superfamily in, sequence of, 349, 963
Ethylene, from cherry tomato, 1371
Ethylene induction, in cucumber fruit, impedance analysis of, 199
Eucalyptus, mitochondrial malate dehydrogenase in, 1455
Euphorbia lagascae, microsomal phospholipases of, fatty acid selectivity of, 953
Evergreen, dark leaf respiration in, 421
Expansin, cucumber hypocotyl cell wall and, 87

F

Fatty acid biosynthesis, in pea root plastid, 413
Fatty acid desaturation, in chilling stress, in tobacco leaf, 1177
Ferredoxin-$NADP^+$ reductase, in *Chlamydomonas reinhardtii* chloroplast, 1387
Fescue, leaf of, growth zone of, fructosyltransferase in, 1411
Flaveria bidentis, flavonol sulfotransferase-like cDNA clone from, 1019
Flaveria pringlei (Asteraceae), *gdcsPA* gene in, 655
Flavonol sulfotransferase-like cDNA clone, in *Flaveria bidentis*, 1019
Floral organs, thermogenic, of voodoo lily, vaccinic acid in, 1433
Freezing tolerance, in *Arabidopsis thaliana*, abscisic acid and, 141
Fructan-accumulating tobacco, drought resistance in, 125
Fructose-1,6-bisphosphatase, in pea chloroplast, 313
Fructose-2,6-bisphosphate, in rice seed dormancy, 1365
Fructosyltransferase, in tall fescue leaf growth zone, 1411
Fruit
  of cucumber, ethylene induction in, impedance analysis of, 199
  of melon, aminocyclopropane-1-carboxylate synthase in, 297
  of pineapple, cell wall polysaccharide composition of, 1399
  of tomato, lipoxygenase in, 669
Fucus disticus, actin DNA in, 1007
Fungal sterol, perception of, in tomato, 485
Fusicoccin, cell wall synthesis and, in oat shoot, 553

G

gdcsPA gene, in *Flaveria pringlei* (Asteraceae), 655
Germin-like oxalate oxidase, in barley seedling, 1091

Gibberellic acid, cell wall synthesis and, in oat shoot, 553
Gibberellins
cucumber hypocotyl growth and, 131
of *Petunia hybrida*, pigmentation gene induction and, 695
tobacco phytochrome A overexpression and, 797
Ginkgo biloba, light-harvesting complex *b* in, 593
β-Glucan synthesis, in cotton fiber, 111
β-1,3-Glucanase, in potato, 1453
β-Glucosidase, coniferin, from pine xylem, 331
Glutamine synthetase
in mothbean nodule, 279
nitrogen transport and, in corn kernel, 757
Glutathione deficiency, in *Arabidopsis* mutant, 1059, 1067
Glutathione reductase, paraquat sensitivity and, in tobacco, 645
Glutathione *S*-conjugate transport, vacuolar, in *Arabidopsis*, 1257
Glutathione *S*-transferase
auxin-regulated, in tobacco, 2,4-dichlorophenoxyacetic acid and, 1139
in corn seedling, 311
Glycerol-3-phosphate acyltransferase, in bean, 1039
Glycine max (*see* Soybean)
Glycinebetaine
in corn, 621
salt tolerance and, 631
Glycinins, in soybean seeds, 665
Gonyaulax polyedra, nitrate reductase activity in, circadian oscillation of, 225
Gossypium hirsutum (*see* Cotton)
Grain, of wheat, disulfide isomerase in, 281
Grape, berries of, malic enzyme in, 1009
Gravistimulus, cell wall synthesis and, in oat shoot, 553
Guanosine triphosphate-binding protein, in corn, 275

H

Heat-shock protein
in *Arabidopsis thaliana* endomembrane, 287
in rape, cold-induced, 915
Heat-shock response, of sunflower tetraubiquitin mRNA, 765
Helianthus annuus (*see* Sunflower)
Hemoglobin, from *Myrica gale* root nodules, 827
Herbicides, imidazoleglycerol phosphate dehydratase inhibitors in, 719
Heteromeles arbutifolia, dark leaf respiration in, 421
Hordeum vulgare (*see* Barley)
Hydrogen peroxide, pea epicotyl production of, 501
Hydroxycinnamoyl-coenzyme A:tyramine hydroxycinnamoyltransferase, in potato, 545
Hypocotyl
of *Arabidopsis thaliana*, elongation of, cytokinin-ethylene coupling and, 1075
of cucumber
cell walls of, expansin and, 87
phytochrome and gibberellins and, 131
of soybean, growth and auxin-stimulated NADH oxidase in, thiol reagents and, 1285

I

Imidazoleglycerol phosphate dehydratase inhibitors, in herbicides, 719
Indoleacetic acid
cell wall synthesis and, in oat shoot, 553
metabolism of, 323
in *Lemna gibba*, 77
Inositol phosphate synthase, in *Arabidopsis thaliana*, 613
Ipomoea batatus (*see* Sweet potato)
Iron deficiency, in cucumber root, 1195
Iron excess, tobacco leaf and, 725
Irradiance stress, *Dunaliella salina* chloroplast response to, 885
Isocitrate dehydrogenase, $NADP^+$-dependent, in potato, 905
Isoleucine feedback, defective, in *Arabidopsis* mutant, 43
Isoprenoid metabolism, 1

J

Jojoba, seed of, photoaffinity labeling of, 155

K

Kernel, of corn, glutamine synthetase in, nitrogen transport and, 757
Kunitz-type proteinase inhibitors, in soybean, 1015

L

Lassase, acidic, in sycamore maple, 667
Leaf
of *Arabidopsis thaliana*
β-amylase gene in, 895
cell wall polysaccharides of, 1129
photosystem II and D1 protein in, 943
of barley, sucrose:fructan 6-fructosyltransferase in, 1249
of beet
guard-cell totipotency of, 1379
phosphate status, photosynthesis, and carbon partitioning in, 1313
of coffee, metallothionein I-like protein in, 295
of corn, development of, photosynthesis and, 815
dark, respiration in, in evergreen and deciduous plants, 421
of pea, respiration in, developmental regulation of, 925
of potato, serine hydroxymethyltransferase in, 271
of soybean, lipoxygenase isozymes in, 535
of spinach, nitrate reductase inhibitor protein in, 451
of sweet cherry, *syrB* gene activation in, 603
of tall fescue, growth zone of, fructosyltransferase in, 1411
of tobacco
chilling stress in, fatty acid desaturation and, 1177
iron excess and, 725
photosynthesis by, 215
photosynthetic carbon metabolism and translocation in, 507
of wheat
chloroplast development in, 63
phospho*enol*pyruvate carboxylase in, phosphorylation of, 775
Lectin
Arum maculatum major protein tuber as, 1147
in black locust bark, 833
Lemna gibba, indoleacetic acid turnover in, 77
Lepechinia fragans, dark leaf respiration in, 421
Light
chloroplast α-amylase induced by, in pearl millet, 401
dark leaf respiration in, of evergreen and deciduous plants, 421
Light-harvesting complex *b*, in *Ginkgo biloba*, 593
Light-harvesting complexes I and II, in pigment-protein biogenesis, of barley mutant, 709
Light sensitivity, of chlorophyll *a*/*b*-binding protein genes, 161
Lignin, cellulose interactions with, in black spruce, 977
Lipoxygenase, in tomato fruit, 669
Lipoxygenase isozymes, in soybean leaf, 535
Lophopyrum elongatum, mitochondria of, proline tRNA gene in, 303
Lotus corniculatus (*see* Birdsfoot trefoil)
Lotus japonicus, Pzf protein from, RING finger proteins and, 1457
Lycopersicon esculentum (*see* Tomato)

M

Macrophyte, amphibious, growth and nutrient uptake by, 149
Maize (*see* Corn)
Malate dehydrogenase, in eucalyptus mitochondria, 1455
Malic enzyme, from grape berries, 1009
Manganese superoxide dismutase, tobacco chloroplast overproduction of, 737
Marigold, thiophene synthesis mutants in, 807
Mastoparan, carrot cell plasma membrane phosphoinositide phospholipase C and, 845
Medicago sativa (*see* Alfalfa)
Medicago truncatula
mutant of, nodulation of, 53
PR-1-like protein in, 273
Melon, fruit of, aminocyclopropane-1-carboxylate synthase in, 297
Metallothionein I-like protein, in coffee leaf, 295
Methylcrotonyl-coenzyme A carboxylase, of *Arabidopsis thaliana*, 1013
Mitochondria
of beet, NAD(P)H dehydrogenase in, 443
of *Chlamydomonas reinhardtii*, isolation and characterization of, 479
of corn, NAD(P)H dehydrogenase in, 443
of eucalyptus, malate dehydrogenase in, 1455
of *Lophopyrum elongatum*, proline tRNA gene in, 303

of potato, peptidase β-subunit in, 1467
Molybdenum cofactor synthesis, abscisic acid and, mutants affected in, 1427
Mothbean, nodules of, glutamine synthetase in, 279
Mustard, *S*-adenosyl-L-methionine synthetase from, 1021
Myrica gale
root nodules of
diffusion barrier in, 1269
hemoglobin from, 827

N

NADH oxidase, auxin-stimulated, in soybean hypocotyl, thiol reagent and, 1285
NAD(P)H dehydrogenase, in corn and beet mitochondria, 443
Nicotiana (*see* Tobacco)
Nitrate, in tomato transpiration stream, 377
Nitrate reductase
in barley, nitrate regulation of, 1303
in *Chlamydomonas reinhardtii* chloroplast, 1387
corn seedling growth and, 1225
in *Gonyaulax polyedra*, circadian oscillation of, 225
Nitrate reductase inhibitor protein, in spinach leaf, 451
Nitrite assimilation, under carbon dioxide limitation, in *Synechococcus* sp. PCC942, 791
Nitrogen, interactions with carbon and nutrients, in beet, 575
Nodule
of alfalfa, oxygen permeability of, nitrate and, 1355
of birdsfoot trefoil, oxygen permeability of, nitrate and, 1355
of mothbean, glutamine synthetase in, 279
of *Myrica gale*
diffusion barrier, 1269
hemoglobin from, 827
of soybean
allantoinase in, 435
oxygen limitation and drought in, 1187
polysaccharide specific to, *Bradyrhizobium japonicum* bacteroids and, 857
Norway spruce, *rbcL* gene in, 1037
Nostoc, strain ATCC 29133 of, nucleotide sequence of, 267
Nuclear import signals, in corn, 1055

O

Oat
root of, phytochelatin transport across, 1295
shoot of, cell wall synthesis in, 553
Oryza sativa (*see* Rice)
Ovary
of corn, carbohydrate metabolism in, 385
of pea, unpollinated, arginine decarboxylase and putrescine oxidase in, 865
Oxalate oxidase, germin-like, in barley seedling, 1091
Oxidase, alternative, in tobacco, 1469
Oxidative stress tolerance, in transgenic plant, 1049
Oxygen concentration, in soybean nodule, 1187, 1209
Oxygen synthesis, by *Phytophthora* elicitor-stimulated rose cell, 1241

P

Paraquat sensitivity, in tobacco, glutathione reductase and, 645
Pea
axillary bud of, ribosomal protein L27 in, 1031
brain protein homolog from, 1481
chloroplast of, fructose-1,6-bisphosphatase in, 313
disease-resistance response gene in, 301
epicotyl, hydrogen peroxide production in, 501
leaf of, respiration in, developmental regulation of, 925
nuclear enzyme of, protein tyrosine phosphatase activity of, 167
ovary of, unpollinated, arginine decarboxylase and putrescine oxidase in, 865
pea weevil resistance in, 1253
root of
glycolytic and fatty acid biosynthesis in, 413
phytochelatin synthesis in, 515
seedling of, light-inducible protein expression in, 1167
Pea weevil, resistance to, in transgenic pea, 1253
Pearl millet, chloroplast of, light-induced α-amylase in, 401
Pectate lyase superfamily, in *Erwinia chrysanthemi*, sequence alignment of, 349, 963
Pennisetum americanum (*see* Pearl millet)
Peroxisome import system, in vivo, 1201
Petunia hybrida
gibberellins of, pigmentation gene induction and, 695
S1-RNase gene of, 307
Phaseolus vulgaris (*see* Bean)
Phosphate
accumulation of, by *Arabidopsis thaliana* mutant, 207
in beet leaf, 1313
in tomato transpiration stream, 377
Phosphatidylinositol 4-kinase, soluble, in carrot, 491
Phospho*enol*pyruvate carboxylase, in wheat leaf, phosphorylation of, 775
Phosphoglycerate kinase
chloroplastic, of *Chlamydomonas reinhardtii*, 393
in wheat chloroplast, 1483
Phosphoinositide phospholipase C
animal, similar to *Arabidopsis thaliana*, 1029
in carrot cell plasma membrane, mastoparan and, 845
Phospholipase, selectivity of, for fatty acids, 953
Photoaffinity labeling, of jojoba seed, 155
Photoinhibition, in *Chorella vulgaris*, resistance to, 687
Photosynthesis
in beet leaf, 1313
in *Chorella saccharophila*, 245
in tobacco leaf, 215, 507
Photosystem I, PsaD subunit of, in *Chlamydomonas reinhardtii*, 1485
Photosystem II
of *Arabidopsis thaliana* leaf, 943
D-*de* loop mutation in, 187
photoinhibition and, in *Chorella vulgaris*, 687
Phycocyanin genes, in *Cyanidium caldarium*, 985
Phytochelatin synthesis, in pea root, 515
Phytochelatin transport, in oat root, 1295
Phytochrome, cucumber hypocotyl growth and, 131
Phytochrome A, transgenic tobacco overexpression of, 797
Phytochrome promoters, in *Arabidopsis thaliana* seedlings, 523
Phytolacca americana (*see* Pokeweed)
Phytophthora elicitor-stimulated rose cell, oxygen synthesis by, 1241
Picea abies (*see* Norway spruce)
Picea mariana (*see* Black spruce)
Pigment-protein complexes, in barley, 565
Pine, xylem of, coniferin β-glucosidase from, 331
Pineapple, fruit of, cell wall polysaccharide composition of, 1399
Pinus contorta (*see* Pine)
Pisum sativum (*see* Pea)
Plastid, of pea root, fatty acid biosynthesis in, 413
Pokeweed, polyphenol oxidase cDNAs of, 1083
Pollen
of corn
actin-depolymerizing factor in, 1011
actin polymerization in, 73
of tobacco, germination and tube growth of, 639
Polyphenol oxidase, of pokeweed, 1083
Polysaccharide, soybean nodule-specific, *Bradyrhizobium japonicum* bacteroids and, 857
Populus gene, encoding bispecific caffeic acid/5-hydroxyferulic acid *O*-methyltransferase, 1459
Potassium channel, activation of, in broad bean, 101
Potato
acetolactate synthase in, antisense inhibition of, 469
β-1,3-glucanase in, 1453
chloroplast of, ribosomal protein S16 in, 293
cytochrome *c* reductase 14-kDa subunit in, 1217
cytosolic $NADP^+$-dependent isocitrate dehydrogenase in, 905
hydroxycinnamoyl-coenzyme A:tyramine hydroxycinnamoyltransferase in, 545
leaf of, serine hydroxymethyltransferase from, 271
mitochondrial processing peptidase β-subunit of, 1467
tuber of, lipoxygenase of, 265
Proline, in *Lophopyrum elongatum* mitochondria, 303
Protein
high mobility, in barley, 269
metallothionein I-like, in coffee leaf, 295
thaumatin-like, in *Arabidopsis thaliana*, 305
water deficit-induced, in bean seedling, 1119

Protein L27, ribosomal, in pea axillary bud, 1031
Protein tyrosine phosphatase activity, of pea nuclear enzyme, 167
Proteinase inhibitors, Kunitz-type, in soybean, 1015
Prunus avium (*see* Sweet cherry)
Putrescine oxidase, of unpollinated pea ovary, 865
Pzf protein, from soybean and *Lotus japonicus*, RING finger proteins and, 1457

R

Rape, hsp90 transcripts in, cold-induced accumulation of, 915
rbcL gene, in Norway spruce, 1037
Respiration, dark leaf, in evergreen and deciduous plants, 421
Rhizobium meliloti, *Medicago* symbiosis with, 53, 783
Ribonucleoprotein, RNA-binding characteristics of, from spinach chloroplast, 933
Ribosomal protein L19, in assimilate-accumulating tobacco, 1451
Ribosomal protein S8, eukaryotic, in rice, 1463
Ribosomal protein S16, in rice, 1471
Ribosome-inactivating protein gene, in corn, 661, 1323
Ribulose-1,5-bisphosphate carboxylase/oxygenase activation
  in *Chlamydomonas reinhardtii* chloroplast, 1387
  in tomato
    chilling stress and, 585
    organ-specific regulation of, 1105
Rice
  cationic peroxidase in, localization of, 1333
  chloroplast of, carbonic anhydrase in, 299
  cytosolic copper/zinc-superoxide dismutase in, 651
  eukaryotic ribosomal protein S8 in, 1463
  ribosomal protein S16 in, 1471
  root of, salt tolerance of, abscisic acid and, 177
  seed of
    α-amylase gene in, 25
    dormancy in, 1365
    putative cysteine protease in, 1025
Ricinis communis, microsomal phospholipases of, fatty acid selectivity of, 953
RING finger protein, soybean and *Lotus japonicus* Pzf protein and, 1457
Robinia pseudoacacia (*see* Black locust)
Root
  of *Arabidopsis thaliana*, growth of
    cytokinin and, 233
    cytokinin-ethylene coupling and, 1075
  of beet
    mitochondrial NAD(P)H dehydrogenase in, 443
    tonoplast of, sucrose transport in, 459
  of cucumber, iron deficiency in, 1195
  of oat, phytochelatin transport across, 1295
  of pea
    glycolytic and fatty acid biosynthesis in, 413
    phytochelatin synthesis in, 515
  of rice, salt tolerance of, abscisic acid and, 177
  of sweet potato, starch phosphorylase from, 277
Root nodule (*see* Nodule)
Root-shoot interaction, in wheat seedling, 407
Root tip
  of *Arabidopsis thaliana*, genetics of, 365
  of wheat, aluminum-induced genes in, 341
Rose, cell of, *Phytophthora* elicitor-stimulated, oxygen synthesis by, 1241

S

S1-RNase gene, of *Petunia hybrida*, 307
Salt tolerance
  of corn, glycinebetaine and, 631
  of rice root, abscisic acid and, 177
  in *Synechococcus* sp. PCC7942, betaine aldehyde dehydrogenase and, 703
Sauromatum guttatum (*see* Voodoo lily)
Seed
  of *Arabidopsis thaliana*, nitrogen-limited, germination of, urease in, 1097
  of *Arabidopsis thaliana* mutant, isoleucine feedback deficiency in, 43
  of jojoba, photoaffinity labeling of, 155
  of rice
    α-amylase gene in, 25
    dormancy in, 1365
    putative cysteine protease in, 1025
  of soybean
    chlorophyll-retention mutants of, 253
    glycinins in, 665
Seedling
  of *Arabidopsis thaliana*
    phytochrome promoters in, 523
    root and hypocotyl growth in, cytokinin-ethylene coupling and, 1075
  of barley, germin-like oxalate oxidase in, 1091
  of bean, water deficit-induced proteins in, 1119
  of corn
    glutathione *S*-transferase in, 311
    growth of, nitrate reductase and, 1225
  of pea, light-inducible protein expression in, 1167
  of wheat, root-shoot interaction in, 407
Serine hydroxymethyltransferase, in potato leaf, 271
Shikimate pathway, aromatic metabolism and, 7
Shoot, of oat, cell wall synthesis in, 553
Simmondsia chinensis (*see* Jojoba)
Solanum tuberosum (*see* Potato)
Soybean
  chloroplast of, deoxynucleotide incorporation by, 1277
  cotyledon of, allantoinases in, 435
  hypocotyl of, growth and auxin-stimulated NADH oxidase in, thiol reagents and, 1285
  Kunitz-type proteinase inhibitors in, 1015
  leaf of, lipoxygenase isozymes in, 535
  nodule of
    allantoinases in, 435
    oxygen concentration and adenylate levels in, temperature and, 1209
    oxygen limitation and drought in, 1187
  nodule-specific polysaccharide in, *Bradyrhizobium japonicum* bacteroids and, 857
  Pzf protein from, RING finger proteins and, 1457
  seed of
    chlorophyll-retention mutants of, 253
    glycinins in, 665
Spinach
  chloroplast of, ribonucleoprotein from, RNA-binding characteristics of, 933
  leaf of, nitrate reductase inhibitor protein in, 451
  S-adenosylmethionine decarboxylase gene homology with, 1461
Spinacia oleracea (*see* Spinach)
Spruce
  black, cellulose-lignin interactions in, 977
  Norway, *rbcL* gene in, 1037
Starch, synthesis of, in storage organs, 673
Starch phosphorylase, in sweet potato root, 277
Steroid hormones, tobacco pollen germination and tube growth and, 639
Sterol, fungal, perception of, in tomato, 485
Stomatal opening, in cauliflower, zinc and, 751
Storage organs, starch synthesis in, 673
Storage protein, desiccation and, in tobacco, 1439
Stress response
  oxidative, in transgenic plant, 1049
  of wheat root tips, aluminum-induced genes and, 341
Sucrose:fructan 6-fructosyltransferase, in barley leaf, 1249
Sucrose transport, in beet root tonoplast, 459
Sugar, β-amylase gene induction and, in *Arabidopsis thaliana* leaf, 895
Sunflower, tetraubitquitin mRNAs in, during zygotic embryogenesis, 765
Sweet cherry, leaf of, *syrB* gene activation in, 603
Sweet potato, root of, starch phosphorylase from, 277
Sycamore maple, acidic laccase in, 667
Synechococcus sp. PCC7942
  betaine aldehyde dehydrogenase gene in, salt stress and, 703
  carboxysomes of, biogenesis and ultrastructure of, 1159
  nitrite reductase activity in, carbon dioxide limitation and, 791
Synechocystis PCC6803, photosystem II D-*de* loop mutation in, 187
syrB gene, in sweet cherry leaf, activation of, 603
Syringomycin synthesis, in sweet cherry leaf, 603

T

Tagetes (*see* Marigold)
Temperature, soybean nodule oxygen concentration and adenylate levels and, 1209
Temperature characteristics, broadening of, in enzyme pool, 429

Thaumatin-like protein, in *Arabidopsis thaliana*, 305
Thiol reagent, soybean hypocotyl growth and auxin-stimulated NADH oxidase and, 1285
Thionins, type V, in wheat and *Aegilops*, 1475
Thiophene synthesis mutants, in marigold, 807
Threonine deaminase, in chickpea, 1023
Tobacco
  alternative oxidase in, 1469
  assimilate-accumulating, ribosomal protein and calmodulin-like protein in, 1451
  auxin-regulated glutathione *S*-transferases in, 2,4-dichlorophenoxyacetic acid and, 1139
  chloroplasts of, manganese superoxide dismutase overproduction in, 737
  desiccation and storage protein gene expression in, 1439
  leaf of
    chilling stress in, fatty acid desaturation and, 1177
    iron excess and, 725
    photosynthesis in, 215
    photosynthetic carbon metabolism and translocation in, 507
  paraquat sensitivity of, glutathione reductase and, 645
  pollen of, germination and tube growth of, 639
  transgenic
    fructan-accumulating, drought resistance in, 125
    phytochrome A overexpression in, 797
    zein in, 13
Tomato, *see also* Cherry tomato
  5-aminolevulinic acid dehydratase in, 1033
  fruit of, lipoxygenase in, 669
  Never-ripe mutant of, genetics of, 1343
  Rubisco activation in
    chilling stress and, 585
    organ-specific regulation of, 1105
  sterol perception in, 485
  transpiration stream of, 377
Transgene inactivation, homologous, 679
Transgenic plant, oxidative stress tolerance in, 1049
Trifolium subterraneum (*see* Clover)
Triticum aestivum (*see* Wheat)
Tuber, of potato, lipoxygenase of, 265
γ-Tubulin, from corn, 309

U

Ulmus glabra, microsomal phospholipases of, fatty acid selectivity of, 953
Urease, in nitrogen-limited *Arabidopsis* seed germination, 1097

V

Vaccinic acid, in theromogenic floral organs, of voodoo lily, 1433
Vicia faba (*see* Broad bean)
Vigna aconitifolia (*see* Mothbean)
Vitis vinifera (*see* Grape)
Volumetric elastic modulus, of plant tissue cells, pressure probe determination of, 995
Voodoo lily, theromogenic floral organs of, vaccinic acid in, 1433

W

wali gene induction, stress response and, in wheat root tips, 341
Water potential, carbohydrate metabolism and, in corn ovary, 385
Wheat
  ADP/ATP carrier from, 1473
  chloroplast of
    elevated carbon dioxide and, 63
    phosphoglycerate kinase in, 1483
  grain of, disulfide isomerase in, 281
  leaf of, phosphoenolpyruvate carboxylase in, phosphorylation of, 775
  male sterility cytoplasm in, 663
  root tips of, aluminum-induced genes in, 341
  seedling of, root-shoot interaction in, 407
  type V thionins in, 1475

X

Xylem, of pine, coniferin β-glucosidase from, 331

Y

Yeast, *Arabidopsis thaliana* arginase in, 1479

Z

Zea mays (*see* Corn)
Zein
  from corn, 13, 291
  in transgenic tobacco, 13
Zinc, cauliflower stomatal opening and, 751